

I CLAIM:

1. A web-based client system for acquiring data from a web-enabled data server, comprising:
a web-based data collector, the data collector for collecting data from the web-enabled
5 data server, the data collector for collecting data periodically, the data collector for
determining the web-enabled data server to collect data from by referencing data source
identifying information, the data collector for converting the data from a markup language
format to a structured data storage format, the data collector for storing the data in a storage
system.
- 10 2. The web-based client system of claim 1, wherein the data collector is a first data collector
and the web-enabled data server is a first web-enabled data server, further comprising a
second web-enabled data server, the second web-enabled data server for providing data from
the storage system to a second data collector.
3. The web-based client system of claim 1, wherein the markup language format comprises
15 Extensible Markup Language (XML).
4. The web-based client system of claim 1, wherein the markup language format comprises
Hypertext Markup Language (HTML).
5. The web-based client system of claim 1, wherein the structured data format comprises
Structured Query Language (SQL).
- 20 6. The web-based client system of claim 1, wherein the data source identifying information is
received from the web-enabled data server.
7. The web-based client system of claim 1, wherein the data source identifying information is
received from a user.
8. The web-based client system of claim 1, wherein the data source identifying information
25 comprises a Uniform Resource Locator (URL).
9. The web-based client system of claim 1, wherein the data collector includes a scheduler, the
scheduler for setting up a data collection schedule.
10. The web-based client system of claim 1, wherein the data collector is adapted to step through
a list of URLs and collects the content pointed to by the URLs.
- 30 11. The web-based client system of claim 1, wherein the data collector is adapted to convert the
markup language format to the structured data storage format by using a mapping function,

the mapping function mapping markup language format data items to structured data storage format data items.

12. The web-based client system of claim 11, wherein the mapping function is adapted to map XML tags to SQL fields.

5 13. The web-based client system of claim 11, wherein the mapping function is adapted to map XML tags to database records.

10 14. The web-based client system of claim 11, wherein the mapping function comprises a first mapping function, further comprising a second mapping function, wherein the data collector is adapted to select the first mapping function based upon information contained in the data source identifying information.

15 15. The web-based client system of claim 1, wherein the data collector is adapted to store the data in the data storage system by inserting a new data item when the new data item appears in the data collected from the web-enabled data server, updating an existing data item content when a value of the existing data item in the data collected from the web-enabled data server changes, or deleting an old data item when the old data item is removed from the data collected from the web-enabled data server.

16. The web-based client system of claim 15, wherein the system is adapted to trigger an alarm when the content of an existing data item changes or when a new data item is added, or when an old data item is deleted.

20 17. The web-based client system of claim 16, wherein the system is adapted to take an action when the alarm is triggered.

18. The web-based client system of claim 1, wherein the system is written in an open scripting language, the open scripting language permitting publication of scripts.

25 19. The web-based client system of claim 1, wherein the system is adapted to be continuously running.

20. The web-based client system of claim 1, further comprising a web-based data processor, the data processor comprising a toolkit, the toolkit comprising a plurality of tools, each tool for performing a data processing operation on the storage system, the tools for processing the data stored in the storage system, the tools for presenting the data to a data user.

21. The web-based client system of claim 1, further comprising a web-based administrator module, the administrator module for configuring and maintaining the web-based client system, the administrator module comprising one or more web-based tools.
22. The web-based client system of claim 21, wherein the administrator module comprises a tool adapted to configure a list of URLs.
23. The web-based client system of claim 21, wherein the administrator module comprises a tool adapted to allow mapping of markup language format items to structured data storage format items.
24. The web-based client system of claim 23, wherein the markup language format items are XML tags and the structured data storage format items are database items in a relational database.
25. The web-based client system of claim 23, wherein the markup language format items are HTML tags and the structured data storage format items are database items in a relational database.
26. The web-based client system of claim 1, further comprising a web-enabled server, the server for converting structured data format data into markup language format data and transmitting markup language data to the web-enabled client.
27. The web-based client system of claim 26, wherein the web-based client system is adapted to store data using a first data model, and the web based server system is adapted to store data in a second data model, different from the first data model.
28. A web-based data server system for transmitting data to a web-enabled client, comprising:
a web enabler agent, the web enabler agent for reading the data from a structured data formatted data storage system, the web enabler agent for converting the data from a structured data format to a markup language format, the web enabler agent for transmitting the data to a web-enabled client.
29. The web-based data server system of claim 28, wherein the markup language format comprises Extensible Markup Language (XML).
30. The web-based data server system of claim 28, wherein the markup language format comprises Hypertext Markup Language (HTML).
31. The web-based data server system of claim 28, wherein the structured data format comprises Structured Query Language (SQL).

32. The web-based data server system of claim 28, wherein the data collector is adapted to convert the structured data storage format to the markup language format by using a mapping function, the mapping function for mapping structured data storage format data items to markup language format data items.

5 33. The web-based data server system of claim 32, wherein the mapping function is adapted to map SQL fields and records to XML tags.

34. The web-based data server system of claim 28, wherein the system is written in an open scripting language, the open scripting language permitting publication of scripts.

10 35. The web-based data server system of claim 28, wherein the system is adapted to be continuously running.

36. The web-based data server system of claim 28, further comprising a web-based administrator module, the administrator module for configuring and maintaining the web-based data server system, the administrator module comprising one or more web-based tools.

15 37. The web-based data server system of claim 36, wherein the administrator module comprises a tool adapted to allow mapping of structured data storage format items to markup language format items.

38. The web-based data server system of claim 36, wherein the markup language format items are XML tags and the structured data storage format items are database items in a relational database.

20 39. The web-based data server system of claim 36, wherein the markup language format items are HTML tags and the structured data storage format items are database items in a relational database.

25 40. The web-based data server system of claim 28, further comprising a web-enabled client, the client for converting markup language format data into structured data format data and storing the structured data format data into a data storage system.

41. The web-based data server system of claim 40, wherein the web-based client system is adapted to store data using a first data model, and the web based data server system is adapted to store data in a second data model, different from the first data model.

30 42. A method for converting structured data format data into markup language format data comprising:

creating a query identifier tag in the markup language format, the query identifier tag having a value that identifies the query that created the structured data format data;

creating a record container tag in markup language format, the record container tag having a record container tag name that identifies a structured data format record, the record container tag name being determined by a mapping function; and

creating a field entry tag in markup language format, the field entry tag having a field entry tag name that identifies a structured data format field, the field entry tag name being determined by a mapping function, the field entry tag containing a value that corresponds to the value of the identified structured data format field.

43. A method for converting markup language format data into structured data format data and storing the structured data format data into a database item, comprising:

identifying the database item by reading a query identifier from the markup language format data;

identifying a data mapping function to use in converting the markup language format data by reading a query identifier from the markup language format data;

identifying a structured data format record, the structured data format record having a structured data format record name generated by applying the data mapping function to a record container tag contained within the markup language format data;

where the structured data format record name does not already exist in the structured data storage item, creating a new structured data format record and storing the structured data format record name therein;

identifying for the structured data format record name a structured data format field, the structured data format field having a structured data format field name generated by applying the data mapping function to a field entry tag contained within the markup language format data, and storing the field entry tag value associated with the field entry tag into the structured data storage format field.